

DOCKET NO. D-1993-076 CP-3

DELAWARE RIVER BASIN COMMISSION

**Bucks County Water and Sewer Authority
Upper Dublin Wastewater Treatment Plant
Upper Dublin Township, Montgomery County, Pennsylvania**

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) by Carroll Engineering Corporation on behalf of the Bucks County Water and Sewer Authority (BCWSA) on January 14, 2013 (Application), for review and renewal of the existing Upper Dublin Wastewater Treatment Plant (WWTP) and its related discharge. National Pollutant Discharge Elimination System (NPDES) Permit No. PA0029441-A1 for this project was approved by the Pennsylvania Department of Environmental Protection (PADEP) on February 14, 2006. A renewal application for the NPDES permit was submitted to the PADEP in September 2010. Renewal of the NPDES permit is expected shortly.

The Application was reviewed for continuation of the project in the Comprehensive Plan and approval under Section 3.8 of the *Delaware River Basin Compact*. The Montgomery County Planning Commission has been notified of pending action. A public hearing on this project was held by the DRBC on May 7, 2013.

A. DESCRIPTION

1. **Purpose.** The purpose of this docket is to renew approval of the docket holder's existing 1.10 million gallons per day (mgd) WWTP and its related discharge.
2. **Location.** The BCWSA Upper Dublin WWTP will continue to discharge treated effluent to Pine Run, at River Mile 92.47 – 12.5 – 10.6 – 1.1 – 0.7 (Delaware River - Schuylkill River - Wissahickon Creek – Sandy Run – Pine Run), via Outfall No. 1, in Upper Dublin Township, Montgomery County, Pennsylvania.

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
001	40° 08' 3.8"	75° 11' 34.1"

3. **Area Served** The BCWSA Upper Dublin WWTP will continue to serve the Fort Washington Office Park and a portion of Upper Dublin Township in Montgomery County, Pennsylvania.

For the purpose of defining the Area Served, sections B (Type of Discharge) and D (Service Area) of the docket holder's Application are incorporated herein by reference, to the extent consistent with all other conditions contained in the DECISION Section of this docket.

4. **Physical Features.**

a. **Design Criteria.** The docket holder will continue to operate the existing 1.10 mgd BCWSA Upper Dublin WWTP.

b. **Facilities.** The existing WWTP includes a trickling filter plant and an anaerobic/oxic (A/O) activated sludge plant, operating in parallel and combine into one outfall. The flows into the WWTP are split as follows:

- Approximately 0.5 mgd to primary clarifiers, trickling filter, secondary clarifiers and chlorine disinfection.
- Approximately 0.6 mgd to the A/O treatment plant, secondary clarifiers and chlorine disinfection.
- The combined effluent flow is dechlorinated prior to discharge.

Treatment processes presently consist of prescreening (bar screen and comminutor), the trickling filter (including primary settling, primary and secondary trickling, and chemical addition) in parallel with the A/O unit (includes a flow equalization tank, two anaerobic and four oxic compartments with fine bubble diffusers, a secondary clarifier, chlorination, and post aeration).

The existing facility is located within the 100-year floodplain. However, the WWTP is protected from it by a berm around all sides, and a floodgate at the driveway entrance. The berm and floodgate protect the WWTP to an elevation above the 100-year flood elevation.

Wasted sludge will be hauled off-site by a licensed hauler for disposal at a state approved facility.

c. **Water withdrawals.** The potable water supply in the project service area is provided by Aqua Pennsylvania, as described in DRBC Docket No. D-1967-050 CP, approved on April 26, 1967, by the Borough of Ambler, as described in DRBC Docket No. D-1985-026 CP-5, approved on March 10, 2010, and by North Wales Water Authority, as described in DRBC Docket No. D-1990-006 CP-3, which was approved on December 8, 2011.

d. **NPDES Permit / DRBC Docket.** NPDES Permit No. PA0029441-A1 was approved by the PADEP on February 14, 2006 and includes final effluent limitations for the project discharge of 1.10 mgd to surface waters classified by the PADEP as a Migratory Fishery (MF) and a Trout Stocked Fishery (TSF). The PADEP is expected to renew this Permit shortly.

The following average monthly effluent limits are among those listed in the NPDES Permit and meet or are more stringent than the effluent requirements of the DRBC.

EFFLUENT TABLE A-1: DRBC Parameters Included in NPDES Permit

OUTFALL 001 WWTP		
PARAMETER	LIMIT	MONITORING
pH (Standard Units)	6 to 9 at all times	As required by NPDES permit
Total Suspended Solids	30 mg/l	As required by NPDES permit
CBOD5 (5-1 to 10-31)	13 mg/l (85% minimum removal*)	As required by NPDES permit
(11-1 to 4-30)	25 mg/l (85% minimum removal*)	
Ammonia Nitrogen (5-1 to 10-31)	2.2 mg/l	As required by NPDES permit
(11-1 to 4-30)	6.6 mg/l	
Fecal Coliform	200 colonies per 100 ml as a geo. avg.	As required by NPDES permit

* DRBC Requirement

The PADEP has required a year round total phosphorous limit of 2 mg/l and an orthophosphate limit from April 1st to July 31st of 1.4 mg/l for the WWTP. However, the Commission does not have basin wide effluent limits for phosphorous or orthophosphate.

EFFLUENT TABLE A-2: DRBC Parameters Not Included in NPDES Permit

OUTFALL 001 WWTP		
PARAMETER	LIMIT	MONITORING
Total Dissolved Solids*	1,000 mg/l*	One Per Quarter **

* DRBC Requirement

** See DECISION Condition II.p.

e. **Relationship to the Comprehensive Plan.** The 0.85 mgd BCWSA Upper Dublin WWTP was included in the Comprehensive Plan upon approval of Docket No. D-1993-076 CP on February 23, 1994. The WWTP rerate from 0.85 mgd to 1.10 mgd was incorporated into the Comprehensive Plan by approval of Docket No. D-1993-076 CP-2 on July 15, 2009. Issuance of this docket will continue the WWTP in the Comprehensive Plan.

B. FINDINGS

The purpose of this docket is to renew approval of the docket holder's existing 1.10 mgd WWTP and its related discharge.

Near the project site, Pine Run has an estimated seven-day low flow with a recurrence interval of ten years of 0.37 mgd (0.57 cfs). The ratio of this low flow to the average design wastewater discharge (1.10 mgd or 1.71 cfs) from the WWTP is 1:3.

The nearest public water supply of record located approximately 12 river miles downstream of the project discharge is for the City of Philadelphia operated by Philadelphia Water Department, on the Schuylkill River.

The project does not conflict with the Comprehensive Plan and is designed to prevent substantial adverse impact on the water resources related environment, while sustaining the current and future water uses and development of the water resources of the Basin.

The limits in the NPDES Permit are in compliance with Commission effluent quality requirements, where applicable.

The project is designed to produce a discharge meeting the effluent requirements as set forth in the *Water Quality Regulations (WQR)* of the DRBC.

C. DECISION

I. Effective on the approval date for Docket No. D-1993-076 CP-3 below:

a. The project described in Docket No. D-1993-076 CP-2 is removed from the Comprehensive Plan to the extent that it is not included in Docket No. D-1993-076 CP-3; and

b. Docket No. D-1993-076 CP-2 is terminated and replaced by Docket No. D-1993-076 CP-3; and

c. The project and the appurtenant facilities described in Section A “Physical Features” of this docket shall be added to the Comprehensive Plan.

II. The project and appurtenant facilities as described in Section A “Physical Features” of this docket are approved pursuant to Section 3.8 of the *Compact*, subject to the following conditions:

a. Docket approval is subject to all conditions, requirements, and limitations imposed by the PADEP in its NPDES Permit and such conditions, requirements, and limitations are incorporated herein, unless they are less stringent than the Commission’s.

b. The facility and operational records shall be available at all times for inspection by the DRBC.

c. The facility shall be operated at all times to comply with the requirements of the Commission’s *WQR*.

d. The docket holder shall comply with the requirements contained in the Effluent Tables in Section A.4.d. of this docket. The docket holder shall submit the required monitoring results directly to the DRBC Project Review Section. The monitoring results shall be

submitted annually, absent any observed limit violations, by January 31. If a DRBC effluent limit is violated, the docket holder shall submit the result(s) to the DRBC within 30 days of the violation(s) and provide a written explanation that states the action(s) the docket holder has taken to correct the violation(s) and protect against any future violations.

e. Except as otherwise authorized by this docket, if the docket holder seeks relief from any limitation based upon a DRBC water quality standard or minimum treatment requirement, the docket holder shall apply for approval from the Executive Director or for a docket revision in accordance with Section 3.8 of the *Compact* and the *Rules of Practice and Procedure*.

f. If at any time the receiving treatment plant proves unable to produce an effluent that is consistent with the requirements of this docket approval, no further connections shall be permitted until the deficiency is remedied.

g. Nothing herein shall be construed to exempt the docket holder from obtaining all necessary permits and/or approvals from other State, Federal or local government agencies having jurisdiction over this project.

h. The docket holder is permitted to treat and discharge wastewaters as set forth in the Area Served section of this docket, which incorporates by reference sections B (Type of Discharge) and D (Service Area) of the docket holder's Application to the extent consistent with all other conditions of this DECISION section.

i. The docket holder shall make wastewater discharge in such a manner as to avoid injury or damage to fish or wildlife and shall avoid any injury to public or private property.

j. No sewer service connections shall be made to newly constructed premises with plumbing fixtures and fittings that do not comply with water conservation performance standards contained in Resolution No. 88-2 (Revision 2).

k. Nothing in this docket approval shall be construed as limiting the authority of DRBC to adopt and apply charges or other fees to this discharge or project.

l. The issuance of this docket approval shall not create any private or proprietary rights in the waters of the Basin, and the Commission reserves the right to amend, suspend or rescind the docket for cause, in order to ensure proper control, use and management of the water resources of the Basin.

m. Unless an extension is requested and approved by the Commission in advance, in accordance with paragraph 11 of the Commission's Project Review Fee schedule (Resolution No. 2009-2), the docket holder is responsible for timely submittal of a docket renewal application on the appropriate DRBC application form at least 12 months in advance of the docket expiration date set forth below. The docket holder will be subject to late charges in the event of untimely submittal of its renewal application, whether or not DRBC issues a reminder notice in advance of the deadline or the docket holder receives such notice. In the

event that a timely and complete application for renewal has been submitted and the DRBC is unable, through no fault of the docket holder, to reissue the docket before the expiration date below (or the later date established by an extension that has been timely requested and approved), the terms and conditions of the current docket will remain fully effective and enforceable against the docket holder pending the grant or denial of the application for docket approval.

n. The Executive Director may modify or suspend this approval or any condition thereof, or require mitigating measures pending additional review, if in the Executive Director's judgment such modification or suspension is required to protect the water resources of the Basin.

o. Any person who objects to a docket decision by the Commission may request a hearing in accordance with Article 6 of the Rules of Practice and Procedure. In accordance with Section 15.1(p) of the Delaware River Basin Compact, cases and controversies arising under the Compact are reviewable in the United States district courts.

p. The docket holder may request of the Executive Director in writing the substitution of specific conductance for TDS. The request should include information that supports the effluent specific correlation between TDS and specific conductance. Upon review, the Executive Director may modify the docket to allow the substitution of specific conductance for TDS monitoring.

q. The docket holder is prohibited from treating/pre-treating any hydraulic fracturing wastewater from sources in or out of the Basin at this time. Should the docket holder wish to treat/pre-treat hydraulic fracturing wastewater in the future, the docket holder will need to first apply to the Commission to renew this docket and be issued a revised docket allowing such treatment and an expanded service area. Failure to obtain this approval prior to treatment/pre-treatment will result in action by the Commission.

BY THE COMMISSION

DATE APPROVED: May 8, 2013

EXPIRATION DATE: May 8, 2018